

Utility Patent Application

CONFIDENTIAL INFORMATION

5 Patent Application based on: Docket No. 01 -984
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UMBRELLA WITH ILLUMINATED SHAFT

RELATED APPLICATIONS

15 The present invention was first described in Disclosure Document
Registration Number 496,428 filed on July 5, 2001 under 35 U.S.C. §122 and 37
C.F.R. §1.14. There are no previously filed, nor currently any co-pending
applications, anywhere in the world.

BACKGROUND OF THE INVENTION

1. Field of the Invention

20 The present invention relates generally to umbrellas and, more
particularly, to an umbrella having a reflective umbrella shaft having batteries in
the handle for powering a plurality of illuminating tubes surrounding the shaft.

2. Description of the Related Art

No one will doubt the effectiveness of an umbrella for keeping one dry while walking in the rain. Their simple but effective design has served mankind well over the years with minimal changes to its basic design. However, when they are used on dark, rainy nights, they do nothing to enhance the user's safety. In fact, they may actually reduce it, in the case of dark or black umbrellas. This reduced visibility, coupled with increased stopping distances, often result in pedestrians being hit, injured or even killed.

A search of the prior art did not disclose any patents that read directly on the claims of the instant invention; however, the following references were considered related.

The following patents describe a lamp device atop an umbrella:

U.S. Patent No. 6,158,451, issued in the name of Tsun-Zong; and
U.S. Patent No. 4,020,585, issued in the name of Wilson.

The following patents describe an illuminated umbrella:

U.S. Patent No. 4,848,385, issued in the name of Penella;
U.S. Patent No. 2,372,471, issued in the name of Campbell; and
U.S. Patent No. 2,087,537, issued in the name of Finkel.

U.S. Patent No. 2,246,836, issued in the name of Campbell describes an umbrella with an illuminated stick.

U.S. Patent No. 4,872,468, issued in the name of R. Cole, describes an umbrella with a reflective strip.

U.S. Patent No. 4,425,602, issued in the name of Lansing, describes an umbrella lamp.

And, U.S. Patent No. D353,041, issued in the name of Stenberg show a design for a combination umbrella and light.

Consequently, there exists a need for a means by which umbrella users can be afforded increased visibility and subsequent safety when umbrellas are used during night time hours.

SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide an improved umbrella.

It is a feature of the present invention to provide an improved umbrella having a lighted handle.

It is a specific feature of the of the present invention to provide an improved umbrella having a reflective umbrella shaft having batteries in the handle for powering a plurality of illuminating tubes surrounding the shaft.

Briefly described according to one embodiment of the present invention, an umbrella with an illuminated shaft is provided. The shaft of the umbrella is provided with a clear, neon-colored tube. A light source or sources, such as incandescent lamps, located on the interior of the tube provide bright illumination to make the umbrella user more visible to approaching motorists. Thus, in dark and rainy conditions, where visibility is the poorest, the invention user is clearly seen and is accordingly more safe while traveling by foot. The light sources are

powered by two AA batteries and are controlled by an on/off switch.

The use of the present invention provides a means to greatly enhance the safety of pedestrians who may be outside on a rainy night in a manner which is quick, easy and effective.

5 In accordance with a preferred embodiment, an umbrella user is more visible to approaching motorists during night time use and thus increase safety for the user.

BRIEF DESCRIPTION OF THE DRAWINGS

10 The advantages and features of the present invention will become better understood with reference to the following more detailed description and claims taken in conjunction with the accompanying drawings, in which like elements are identified with like symbols, and in which:

15 FIG. 1 is a perspective view of an umbrella combination with illuminated shaft is shown according to the preferred embodiment of the present invention; and

FIG. 2 is a perspective view of a handle used therewith.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

1. Detailed Description of the Figures

Referring now to FIG. 1, an umbrella is shown, according to the present invention, comprised of a retractable head 2, a support shaft 4, and a handle section 6. It is currently envisioned that the retractable head 2 can be comprised of various types of flexible, water repellant materials in a variety of patterns. The retractable head 2 and shaft 4 operate together to alternately extend, lock, and retract the head 2 in the manner generally typical of umbrellas which are currently, readily available. The shaft of the umbrella is provided with a clear, neon-colored tube 8. A light source or sources, such as incandescent lamps 9, located on the interior of the tube provide bright illumination to make the umbrella user more visible to approaching motorists.

Referring to FIG. 2, the handle section 6 is shown in greater detail affixed to the lower end of the shaft 4. The handle section 6 holds and contains an battery assembly 10, at the upper end of the handle assembly 6, as well as a plurality of batteries 12 which are stored within a cavity inside the handle section 10. A series of threads 14 are formed along the lower rim of the handle, and a screw cap 16 with matching, receiving threads 18 mate to the threads 14 such as to removably contain the batteries 12.

2. Operation of the Preferred Embodiment

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In operation, and in reference to both FIG. 1 and FIG. 2, the present invention is utilized merely as a normal umbrella. Upon entering a dark location, the user activates the illumination source 8 by use of an on/off switch 14. In this manner, a means is provided to greatly enhance the safety of pedestrians who may be outside on a rainy night in a manner which is quick, easy and effective.

5 The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to best explain the principles of the invention and its practical application, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the Claims appended hereto and their equivalents. Therefore, the scope of the invention is to be limited only by the following claims.

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